

REMARKS

Reconsideration of the above-identified Application is respectfully requested. Claims 13 and 15-20 are in the case. Claims 1-12 were previously canceled. Claims 14 and 21-24 have been canceled. Claims 13-20 have been amended. The Title has been amended.

Initially, although not objected to, the Title has been amended, to more accurately reflect what is claimed, i.e., a product, rather than a method.

Regarding the objections to Claims 14-24, Claims 14 and 21-24 have been canceled, thereby rendering this objection moot with respect thereto, and Claims 15-20 have been amended in accordance with the Examiner's kind suggestion. It is therefore respectfully submitted that this objection has been overcome. Wherefore reconsideration and withdrawal of this objection are respectfully requested.

Regarding rejection of Claims 13 and 15-18 (15-20?) under 35 U.S.C. § 112, 2nd paragraph, as allegedly being indefinite, this rejection is traversed in part, while Claims 13 and 15-20 have been amended to overcome the grounds with respect thereto, with the exception of the second ground with respect to Claim 16. It was alleged that in Claim 16 "said bump" lacks antecedent basis. However, Claim 16 clearly recites prior to the phrase in issue, "wherein an electrically conductive bump is formed...". There being no other bumps recited in the claim or its parent, there is therefore no ambiguity with respect to the reference to "said bump", and clearly this prior recitation provides antecedent basis for it. Regarding the ground with respect to Claims 16-20, note that the amendments now clarify the layer-on-layer relationship. It is therefore respectfully submitted that this rejection has been overcome. Wherefore reconsideration and withdrawal of this rejection are respectfully requested.

Regarding the reminder kindly made by the Examiner with respect to the "product by process" limitations, Applicant respectfully points out that laser trimming results in a new, non-obvious product, as compared with prior art thin

film photolithographic procedures, since such prior art procedures are physically constrained as to inter-conductor spacing to be no smaller than a limit set by the respective process. However, laser trimming may be made highly precise to permit very close spacing of conductors, closer than that permitted by art thin film photolithographic procedures, with the attendant benefits of such closer spacing described in the Specification. It would not have been obvious to have such a structure before the claimed invention, as the resultant high failure rate of such devices would have persuaded semiconductor device fabricators away from such structure. It is therefore respectfully submitted that patentability obtains from the structural limitations of the claimed device.

Regarding the rejection of Claims 13-15 under 35 U.S.C. § 102(b) as allegedly being anticipated by Bernardoni et al., Claim 14 has been canceled, thereby rendering this objection moot with respect thereto, and Claim 13 has been amended to overcome the rejection. Especially in the context of the above discussion of the "product by process" limitations, it is clear that Bernardoni et al. fail to teach or suggest any process or procedure that could produce the dimensions intrinsic to the device of Claim 13, formed as it is by laser trimming away of a layer of conductive material. The other art of record is even less relevant. Therefore, for the above reasons, Claim 13 is allowable over Bernardoni et al., and, indeed, all of the art of record whether considered individually or in any combination. Claim 15 depends from Claim 13 and so is allowable as well for the same reasons, as well as for the additional limitations found therein. Wherefore reconsideration and withdrawal of this rejection are respectfully requested.

Regarding the rejection of Claim 15 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Bernardoni et al. in view of Ishiyama et al., Claim 13, from which Claim 15 depends, has been amended to overcome the rejection. The reasons for the allowability of Claim 13 over Bernardoni et al. are set forth above. The patent to Ishiyama et al. fails to cure the deficiencies of Bernardoni

et al., it being cited merely as showing the trimming of a hole. The other art of record is even less relevant. Therefore, for the above reasons, Claim 13 is allowable over Bernardoni et al., Ishiyama et al., and, indeed, all of the art of record whether considered individually or in any combination. Claim 15 depends from Claim 13 and so is allowable as well for the same reasons, as well as for the additional limitations found therein. Wherefore reconsideration and withdrawal of this rejection are respectfully requested.

Regarding the rejection of Claims 16-18 and 21-22 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Bernardoni et al. in view of Arledge et al., Claim 13, from which all of Claims 16-18 and 21-22 depend, has been amended to overcome the rejection. The reasons for the allowability of Claim 13 over Bernardoni et al. are set forth above. The patent to Arledge et al. fails to cure the deficiencies of Bernardoni et al., it being cited merely as showing a conductive bump protruding through non-conductive and conductive material. The other art of record is even less relevant. Therefore, for the above reasons, Claim 13 is allowable over Bernardoni et al., Arledge et al., and, indeed, all of the art of record whether considered individually or in any combination. Claims 16-18 and 21-22 all depend from Claim 13 and so are allowable as well for the same reasons, as well as for the additional limitations found therein. Wherefore reconsideration and withdrawal of this rejection are respectfully requested.

Regarding the rejection of Claim 19 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Bernardoni et al. in view of Crowley et al., Claim 13, from which Claim 19 depends, has been amended to overcome the rejection. The reasons for the allowability of Claim 13 over Bernardoni et al. are set forth above. The patent to Crowley et al. fails to cure the deficiencies of Bernardoni et al., it being cited merely as showing a conductive layer comprising conductive ink. The other art of record is even less relevant. Therefore, for the above reasons, Claim 13 is allowable over Bernardoni et al., Crowley et al., and, indeed, all of the art of record whether considered individually or in any

combination. Claim 19 depends from Claim 13 and so is allowable as well for the same reasons, as well as for the additional limitations found therein. Wherefore reconsideration and withdrawal of this rejection are respectfully requested.

Regarding the rejection of Claim 20 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Bernardoni et al. in view of Munshi, Claim 13, from which Claim 20 depends, has been amended to overcome the rejection. The reasons for the allowability of Claim 13 over Bernardoni et al. are set forth above. The patent to Munshi fails to cure the deficiencies of Bernardoni et al., it being cited merely as showing a conductive layer comprising a metal ion coating. The other art of record is even less relevant. Therefore, for the above reasons, Claim 13 is allowable over Bernardoni et al., Munshi, and, indeed, all of the art of record whether considered individually or in any combination. Claim 20 depends from Claim 13 and so is allowable as well for the same reasons, as well as for the additional limitations found therein. Wherefore reconsideration and withdrawal of this rejection are respectfully requested.

Regarding the observation that Claims 21-24 do not structurally distinguish over the prior art, these claims have all been canceled, rendering this consideration moot.

It is respectfully submitted that the claims recite the patentably distinguishing features of the invention and that, taken together with the above remarks, the present application is now in proper form for allowance. Reconsideration of the application, as amended, and allowance of the claims are requested at an early date.

While it is believed that the instant amendment places the application in condition for allowance, should the Examiner have any further comments or suggestions, it is respectfully requested that the Examiner contact the undersigned in order to expeditiously resolve any outstanding issues.

To the extent necessary, the Applicants petition for an Extension of Time under 37 C.F.R. §1.136. Please charge any fees in connection with the filing of

this paper, including extension of time fees to the Deposit Account No. 20-0668 of Texas Instruments Incorporated.

Respectfully submitted,

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